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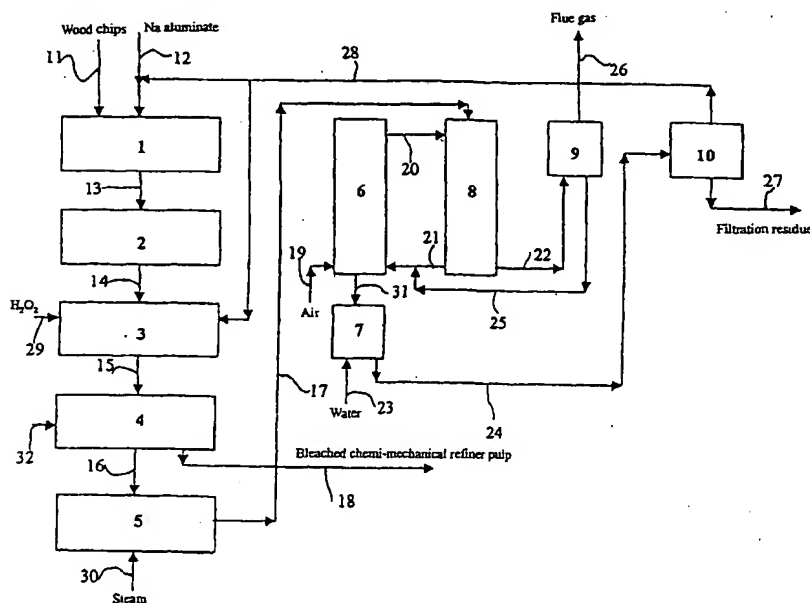
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(54) Title: METHOD FOR BLEACHING MECHANICALLY DEFIBERED PULP



(57) Abstract: The invention relates to a method for bleaching (3) mechanically defibered pulp (14) with peroxide in alkaline conditions and for washing (4) the bleached pulp (15) and recovering chemicals from the spent liquor (16) of the bleaching step by concentrating (5,8) and combusting (6) the spent liquor and subsequently dissolving (7) the ash thus formed into water (13). According to the invention, the alkaline conditions of the bleaching step are obtained by adding sodium aluminate (12) to the pulp (14) to be bleached, at least a part of the added sodium aluminate being said ash (28) dissolved in water.

WO 03/062526 A1

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 03/00051

## A. CLASSIFICATION AND SUBJECT MATTER

IPC7: D21C 9/16, D21B 1/16

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: D21C, D21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|-----------|--|-----------------------|
| Y         | DATABASE WPI<br>Week 198127<br>Derwent Publications Ltd., London, GB;<br>Class F09, AN 1981-48892D<br>& JP 56 058086 A (AGENCY OF IND SCI & TECHNOLOGY),<br>20 May 1981 (1981-05-20)<br>abstract<br>-- | 1-9                   |
| Y         | US 4116759 A (JAN JANSON), 26 Sept 1978 (26.09.78),<br>column 1, line 31 - line 41; column 3,<br>line 35 - line 37; column 4, line 8 - line 10<br>--   | 1-9                   |
| Y         | US 4388148 A (RICHARD A. YAHRMARKT ET AL),<br>14 June 1983 (14.06.83), column 4,<br>line 11 - line 14, claim 1<br>--   | 3-4                   |

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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"&amp;" document member of the same patent family

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|-----------|--|-----------------------|
| A         | Papper och Trä, Volume 6-7, 1977, Jan Janson, "The use of unconventional alkali in cooking and bleaching" page 425 - page 430<br>--  | 1-9                   |
| A         | DATABASE WPI<br>Week 198345<br>Derwent Publications Ltd., London, GB;<br>Class E33, AN 1983-813561<br>& SU 988939 A (CELLULOSE PAPER IND RES),<br>15 January 1983 (1983-01-14)<br>abstract<br>-- | 3-4                   |
| A         | US 2601110 A (JOHN HENRY FISHER ET AL),<br>17 June 1952 (17.06.52)<br>-----  | 1-9                   |

## INTERNATIONAL SEARCH REPORT

Information on patent family members

29/03/03

International application No.

T/FI 03/00051

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
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| US 4388148 A                              | 14/06/83            | NONE                       |                     |
| US 2601110 A                              | 17/06/52            | NONE                       |                     |